



Town of Walpole
Commonwealth of Massachusetts

D.P.W. - Engineering
Town Engineer
Carl J. Balduf, P.E., P.L.S.

Town Hall
135 School St.
Walpole, Ma. 02081
Phone (508) 660-7213
Fax (508) 668-1594

TO: Ashley, Clark
Director of Community & Economic Development

FROM: Carl J. Balduf
Town Engineer

RE: Comprehensive Permit Application 1st Review
“Diamond Hill Estates” – Dupee Street (Map 35, Parcel 380-1)

DATE: May 5, 2020

This office has received the following via digital submission & hard copy on March 9, 2020;

- A five sheet plan set titled “Site Development Plan Comprehensive Permit M.G.L. c. 40B ‘Diamond Hill Estates’ Walpole, Massachusetts Date: February 26, 2020” Prepared By: GLM Engineering Consultants, Inc., Applicant: Wall Street Development Corp P.O. Box 272 Westwood, Massachusetts.
- A single page memorandum from the Zoning Board of Appeals to Town Departments dated March 3, 2020 requesting comments by April 3, 2020.
- A three ring booklet containing multiple sections titled “Application For Comprehensive Permit Under M.G.L. C. 40B Diamond Hill Estates A Residential Condominium Development Dupee Street – Walpole, Ma” dated February 27, 2020, Prepared By: Wall Street Development Corp. P.O. Box 272 Westwood, Ma 02090.

The Assistant Town Engineer and I have reviewed the plan submission only. The exception being binder Section 8 (Traffic Impact Assessment) for which we have provided limited comments. As we understand it, review of the application binder will be performed by yourself and others. Our review included a work session on March 10, 2020 with the applicant and Mr. Rob Truax, of GLM Engineering.

Our comments are noted as follows:

The submitted plans should be considered preliminary. The submittal lacks Construction Details and in general the level of detail required to build a project. We recommend that majority of these items be provided prior to approval rather than attempting to require complete plans as a condition of approval.

General

1. Dupee Street is a private way of very limited width in right of way (30'+/-). Any approval should require the full reconstruction of the existing gravel way and existing utilities (excluding existing sewer subject to manhole and camera inspection) to a paved way matching DPW/Planning Board standards to the extent possible. The proposed extension within Dupee Street should match the same standards.
2. As the proposed construction within the existing private way does not meet the above noted standards, the DPW would never recommend acceptance of this road. The approvals should require the maintenance of the entire roadway and utilities be the responsibility of the proposed condominium association.
3. Project Plans show the extension of municipal 8" water main thru the existing gravel way and then through the entire proposed driveway and looping into existing water main at the west rear corner of the site. An 8" private sewer main already exists within the existing gravel way and is proposed to be extended through most of the remaining portion of Dupee St. The proposed water loop has potential benefit to the Town and the existing water and sewer serve existing houses on Dupee Street, therefore, it may be justified for these utilities to be accepted and become public. To accomplish this, the developer would have to execute a Planning Board Form J and the Town would have to accept them when complete. This may also require the developer to work with the private owners along the road to assign rights over portions which he does not control. If this cannot occur than the condominium association should be required to maintain the road (entire length of Dupee St.). These issues should be discussed with the Sewer & Water Commission for formal recommendation to the Board of Appeals.
4. The applicant should also discuss with the Sewer & Water Commission the need for a water capacity analysis & sewer capacity analysis for each system by the Sewer & Water Commissions Consultants (funded by the applicant).
5. Project Plans also show the installation of drainage pipe within the lower portion of the way with the pipe connecting to the municipal storm drainage system drainage system within High Plain Street. The connection will be allowed only when;
 - a. Complete Hydraulics and Hydrology are submitted showing rate and volume have been mitigated (flows to the existing storm drainage system to remain the same as they are currently or be reduced).
 - b. If the case above cannot be met than an analysis of the existing drainage system with High Plain Street will need to be provided to prove adequate capacity. Said analysis shall include locating the downstream structures, camera inspection of the lines (and cleaning as required), hydraulics and hydrology, and stormcad calculations as required.

Traffic Assessment (Section 8 in Application Binder)

6. Provide AASHTO calculations for the determined Intersection Site Distance (ISD) and Stopping Sight Distance (SSD) on High Plain Street.
7. Perform actual speed measurements to determine the 85th percentile speed. That should be used in the above noted calculations. It may be higher than the assumed 35 mph.
8. Provide a plan (or show on one of the existing plan sheets) the sight distance triangles from the correctly placed proposed stop line at the Dupee Street/High Plain Street Intersection to the observed vehicle location at the center of each lane on High Plain Street. All features along the sight triangles shall be shown along with a profile.

Plan Review

All Plans:

9. A North arrow should be shown

Sheet 2 – Existing Conditions:

10. Provide a benchmark on each end of the site and note the datum utilized.
11. Provide bearing and distances (complete survey) for Dupee Street.
12. Show record (and non-record) monuments used to determine the boundary locations. Currently there are none shown.

Sheet 3 – Proposed Layout

13. Indicate how the shed shown in the layout of Dupee Street will be dealt with (removal or relocation – applicant to determine)
14. Depending upon discussions noted above regarding private vs accepted water main a utility easement will need to be shown adjacent to unit 12 and the southerly lot line (20' min.).
15. Show proposed trash disposal location (dumpster with appropriate fence/screening).

Sheet 4 – Grading & Utilities

16. The proposed water line shown will need to be relocated southerly to accommodate an improved drainage design. Therefore, show the existing water stub to be cut and capped at the main in High Plain St.
17. Show a new proposed water connection to the main approximately 16' east of the existing stub. This may be a tapping sleeve and gate or a triple valve and tee depending upon review from Water Superintendent. Either way a chlorination tap shall be provided on the proposed main.
18. Locate proposed drainage in Dupee St. within the corridor of the former proposed water line. This will allow for the existing catch basin on High Plain, the existing catch basin on the northerly corner of High Plain/Dupee St., a proposed catch basin on the southerly corner of the same all to be connected. A new drain manhole will also need to be installed on the existing drain line in High Plain St. The portion of the existing drain from the existing catch basin to the new drain manhole will need to be abandoned (appears to cross private property).
19. Provide video of existing drain line to Washington Street (as required by this office)
20. Provide drainage calculations as noted above.

21. Show location for proposed Fire Hydrant (consult with WFD, Deputy Chief Barre)
22. Show water gate control at connection of site water main to existing water main near westerly corner of site. Either a tapping sleeve and valve or a tee and water gates on site side of tee and one side or other of connection (to be reviewed with Water Superintendent)
23. Re-build existing portion of Dupee Street as noted above. Show compliant cem conc. ramps at each side of the Dupee/High Plain Entrance.
24. It would appear that a sidewalk cannot be installed within the narrow right of way provided by Dupee St., however, the Board should consider requiring the developer remove and replace an equivalent length along Old Post Road (from High Plain St. to old Post Rd. School)
25. Add an Emergency Overflow Spillway to the Detention Pond. The Pond should be designed to hold the 100 year storm with 1' off freeboard. There should be no discharge through the emergency spillway at the 100 year elevation. The spillway should be detailed in the Construction Details.
26. Provide infiltration trench with perf pipe, stone, and filter fabric at bottom of swale shown at rear of units 2-8 and possibly further in an attempt to increase infiltration.
27. Show all proposed roof drains and foundation drains connecting to swale behind units.

Sheet 5 – Roadway Profile

28. Provide a 1% level landing area at the intersection of Dupee St. with High Plain Street as required in Walpole Planning Board's Rules and Regulation Section IV-5(g).

Additional Sheets Required – Construction Details

29. Use Walpole Standard Details as much as possible and provide details for non-standard items such detention basin, detention basin walls, particulars with roadway sections etc and any other items required in final design.

We anticipate providing comments on revised submissions and remain available should you or the Board have any questions.

cc Sewer and Water Commission
Planning Board
Walpole Fire Department
Conservation Agent
Files

H:/documents/zba/dupeest40b/dupeest1.doc